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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/831,694	07/19/2001	Yushi Ihara	450101-02708	9558

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EXAMINER

DIVINE, LUCAS

ART UNIT PAPER NUMBER

2625

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/831,694	IHARA, YUSHI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Lucas Divine	2625	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 February 2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3 is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/17/06 has been entered.

***Response to Amendment***

2. Claims 1 – 10 are pending.

***Response to Arguments***

3. Applicant's arguments filed 1/17/06 have been fully considered but they are not persuasive.

With respect to applicant's arguments on page 12 that Mori does not teach the new limitations.

In reply, Mori teaches generating means (blank space setup means, col. 8 line 58) for generating a blank image in the image to be printed on the print sheet in a position of the image data not present when the print control information is generated (the image data in a position of the blank image has no image data because blank space is set just be blank space information and parameters [e.g. col. 8 lines 58-67], thus there is no image data and just control information for that position of the print sheet) and image data associated with the print control information is

not present (since it is blank space, there is no associated image data with the blank space setup means, the blank space is generated by the parameters etc [col. 8 lines 62-63]). Therefore the rejection is maintained.

#### ***Claim Objections***

4. Claim 4 objected to because of the following informalities: Examiner believes that the words 'are inputted' at the end of the input means limitation were not meant to be crossed out and will examine as such. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term 'which' in the second to last line is indefinite as to what is set at a value... It is unclear whether this is referring to the print control information, the number of pixels, the capture command, or something else. Changing the term 'which' to whatever it is actually referring to is required to make the claim definite and statutory.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 4, 5, and 7 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori (US 6411400) in view of Fukunaga et al. (US 6603737).

Regarding claim 1, Mori teaches an **image processing device** (host computer 300 as shown functionally in Figs. 2 and 3) **comprising:**

**image processing means** (CPU 1; col. 4 lines 51-53) **for performing image processing on an image signal inputted from outside** (image data can be inputted from external memory 11 for print preparation) **thereby generating image data** (graphic engine 202 as shown in Fig. 3 is controlled by the CPU and takes an image signal and rasterizes it into image data for printing and then sends the data to the printer driver 203; col. 4 line 54 and col. 6 lines 42-44);

**control information generation means** (printer driver 203; col. 6 lines 25-27) **for generating control information** (control commands for the printer discussed in col. 6 lines 48-51) **including information indicating the number of print images on one page of a print sheet** (F11 in Fig. 9 shows a clear example of information indicating the number of print images on one page; col. 9 lines 38-52, wherein N is the number of print images on one page);

**output means** (system spooler 204 as shown in Fig. 3 outputs image data and control information to the printer for controlling the printing of the printer, wherein the actual physical device sending the data over the interface 21 is the printer controller 8) **for including the image data generated by the image processing means and the print control information generated by the control information generation means and outputting to a printing device** (outputting data to the printer; col. 1 lines 55-56);

**generating means** (blank space setup means, col. 8 line 58) **for generating a blank image in the image to be printed on the print sheet in a position of the image data not present when the print control information is generated** (the image data in a position of the blank image has no image data because blank space is set just be blank space information and parameters [e.g. col. 8 lines 58-67], thus there is no image data and just control information for that position of the print sheet) **and image data associated with the print control information is not present** (since it is blank space, there is no associated image data with the blank space setup means, the blank space is generated by the parameters etc [col. 8 lines 62-63]).

While Mori teaches the sending of data to and from a printer in Fig. 2 through a predetermined communication medium [col. 1 line 12] bi-directional [col. 5 line 17] interface 21, Mori does not specifically teach that this interface be **the IEEE (the Institute of Electrical and Electronics Engineers) 1394 standard which utilizes packets for sending data.**

Fukunaga teaches interfacing between a computer and a printer via **the IEEE 1394 standard** (Fig. 1A; col. 1 lines 42-50) **which utilizes packets for sending data** (packet example shown in Fig. 13).

It would have been known obvious to one of ordinary skill in the art to use the IEEE 1394 standard as the interface of Mori. The motivations for doing so include the facts that IEEE 1394 is fast, smart, and an industry standard. Because it is an industry standard, it would be advantageous for an inventor to include its functionality in order for the invention to communicate with other devices on the market. Further, since it is an industry standard, it is well adopted by large companies and would have been well known to those of ordinary skill in the art.

Regarding claim 2, the apparatus elements of Mori in view of Fukunaga as combined as obvious in the rejection of claim 1 perform all of the method steps of method claim 2. Thus, claim 2 is rejected for the same reasons as stated in the rejection of claim 1 above.

Regarding claim 4, Mori teaches a **printing device** (printer 1500 shown physically in Fig. 1 and functionally in Fig. 2) **comprising:**

**input means** (input section 18, which accepts print data and printer control information from the host computer) **to which image data and print control information including information the number of pages on one page of a print sheet are inputted** (F11 in Fig. 9 shows a clear example of information indicating the number of print images on one page; col. 9 lines 38-52, wherein N is the number of print images on one page); **and**

**printing means for printing an image represented by the image data inputted to the input means in accordance with the print control information** (printer engine 17 performs the actual printing in accordance with print information; col. 5 lines 61-62);

**wherein, when the print control information is inputted and the image data associated with the print control information is not present** (as inputted to the printer, the image data in a position of the blank image has no image data because blank space is set just be blank space information and parameters [e.g. col. 8 lines 58-67], thus there is no image data and just control information for that position of the print sheet), **a blank image in the image to be printed is generated in a position of the image data not present** (since it is blank space, there is no associated image data with the blank space setup means, the blank space is generated by the parameters etc [col. 8 lines 62-63]).

While Mori teaches the sending of data to and from a printer in Fig. 2 through a predetermined communication medium [col. 1 line 12] bi-directional [col. 5 line 17] interface 21, Mori does not specifically teach that this interface be **the IEEE (the Institute of Electrical and Electronics Engineers) 1394 standard which utilizes packets for sending data.**

Fukunaga teaches interfacing between a computer and a printer via **the IEEE 1394 standard** (Fig. 1A; col. 1 lines 42-50) **which utilizes packets for sending data** (packet example shown in Fig. 13).

It would have been known obvious to one of ordinary skill in the art to use the IEEE 1394 standard as the interface of Mori. The motivations for doing so include the facts that IEEE 1394 is fast, smart, and an industry standard. Because it is an industry standard, it would be advantageous for an inventor to include its functionality in order for the invention to communicate with other devices on the market. Further, since it is an industry standard, it is well adopted by large companies and would have been well known to those of ordinary skill in the art.

Regarding claim 5, the apparatus elements of Mori in view of Fukunaga as combined as obvious in the rejection of claim 4 perform all of the method steps of method claim 5. Thus, claim 5 is rejected for the same reasons as stated in the rejection of claim 4 above.

Regarding claim 7, Mori teaches **an image printing system** (Fig. 2) **comprising:**  
**an image processing device** (host computer 300 as shown functionally in Figs. 2 and 3)  
**including**

**image processing means** (CPU 1; col. 4 lines 51-53) **for performing image processing on an image signal inputted from outside** (image data can be inputted from external memory



11 for print preparation) **and thus generating image data** (graphic engine 202 as shown in Fig. 3 is controlled by the CPU and takes an image signal and rasterizes it into image data for printing and then sends the data to the printer driver 203; col. 4 line 54 and col. 6 lines 42-44);

**control information generation means** (printer driver 203; col. 6 lines 25-27) **for generating control information** (control commands for the printer discussed in col. 6 lines 48-51) **including information indicating the number of print images on one page of a print sheet** (F11 in Fig. 9 shows a clear example of information indicating the number of print images on one page; col. 9 lines 38-52, wherein N is the number of print images on one page); **and**

**output means** (system spooler 204 as shown in Fig. 3 outputs image data and control information to the printer for controlling the printing of the printer, wherein the actual physical device sending the data over the interface 21 is the printer controller 8) **for including the image data generated by the image processing means and the print control information generated by the control information generation means and outputting to a printing device** (outputting data to the printer; col. 1 lines 55-56);

**wherein, when the print control information is inputted and the image data associated with the print control information is not present** (as inputted to the printer, the image data in a position of the blank image has no image data because blank space is set just be blank space information and parameters [e.g. col. 8 lines 58-67], thus there is no image data and just control information for that position of the print sheet), **a blank image in the image to be printed is generated in a position of the image data not present** (since it is blank space, there is no associated image data with the blank space setup means, the blank space is generated by the parameters etc [col. 8 lines 62-63]);

**a printing device** (printer 1500 shown physically in Fig. 1 and functionally in Fig. 2)  
**including**

**input means** (input section 18, which accepts print data and printer control information from the host computer) **to which image data and print control information including information the number of pages on one page of a print sheet** (F11 in Fig. 9 shows a clear example of information indicating the number of print images on one page; col. 9 lines 38-52, wherein N is the number of print images on one page) **and information indicating the inclusion of a blank image in the image to be printed on the print sheet** (Fig. 8 step 3, Fig. 10 spaces SP11, SP12, SP13, SP14, Fig. 11, Fig. 13; col. 1 lines 56-57 and throughout – in the invention of Mori, a user can select to include blank pages along with image pages in order to allow for notes to be taken, this blank page can be completely blank or have blank spaces in it as shown in Fig. 11, this blank page information then must be sent along with the rest of the print job to be printed on the sheet [examples shown in Fig. 10 and 12]) **are inputted; and**

**printing means for printing an image represented by the image data inputted to the input means in accordance with the print control information** (printer engine 17 performs the actual printing in accordance with print information; col. 5 lines 61-62);

**the printing means setting an image area to be printed on the print sheet as a blank area in the case where the print control information including information indicating inclusion of a blank page is inputted** (print sheet including blank page is shown in Figs. 6, 10, and 12 in the cases where blank page information is inputted).

While Mori teaches the sending of data to and from a printer in Fig. 2 through a predetermined communication medium [col. 1 line 12] bi-directional [col. 5 line 17] interface 21,

Mori does not specifically teach that this interface be **the IEEE (the Institute of Electrical and Electronics Engineers) 1394 standard which utilizes packets for sending data.**

Fukunaga teaches interfacing between a computer and a printer via **the IEEE 1394 standard** (Fig. 1A; col. 1 lines 42-50) **which utilizes packets for sending data** (packet example shown in Fig. 13).

It would have been known obvious to one of ordinary skill in the art to use the IEEE 1394 standard as the interface of Mori. The motivations for doing so include the facts that IEEE 1394 is fast, smart, and an industry standard. Because it is an industry standard, it would be advantageous for an inventor to include its functionality in order for the invention to communicate with other devices on the market. Further, since it is an industry standard, it is well adopted by large companies and would have been well known to those of ordinary skill in the art.

Regarding claim 8, the apparatus elements of Mori in view of Fukunaga as combined as obvious in the rejection of claim 7 perform all of the method steps of method claim 8. Thus, claim 8 is rejected for the same reasons as stated in the rejection of claim 7 above.

Regarding claim 9, the apparatus elements of Mori in view of Fukunaga as combined as obvious in the rejection of claim 1 perform all of the program steps of recording medium having a program stored therein claim 9. Further, Mori teaches in col. 1 lines 13-15 and 61-62 that the invention provides for a storage medium for storing a computer readable program to perform the data processing methods of Mori. Therefore, claim 9 is rejected for the reasons stated in the rejection of claim 1 as implemented as a program.

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Regarding claim 10, the apparatus elements of Mori in view of Fukunaga as combined as obvious in the rejection of claim 4 perform all of the program steps of recording medium having a program stored therein claim 10. Further, Mori teaches in col. 1 lines 13-15 and 61-62 that the invention provides for a storage medium for storing a computer readable program to perform the data processing methods of Mori. Therefore, claim 10 is rejected for the reasons stated in the rejection of claim 4 as implemented as a program.

***Allowable Subject Matter***

7. Claim 3 is allowed.

***Conclusion***

Note: Examiner Divine Art Unit changed from 2624 to 2625.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucas Divine whose telephone number is 571-272-7432. The examiner can normally be reached on Monday - Friday, 7:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on 571-272-7471. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lucas Divine  
Examiner  
Art Unit 2625

ljd

  
**KING Y. POON**  
**PRIMARY EXAMINER**